

22 Nov 1989

OH0NP-B
MEGOHMMETER

1. GENERAL. This procurement requires a portable megohmmeter which uses a hand generator or dc internal power.

2. CLASSIFICATION. Type II, Class 3, Style EP, and Color R in accordance with MIL-T-28800 for shipboard applications with the following exceptions:

- a. The transit drop height requirement is reduced to 46 cm (18 in).
- b. The electromagnetic interference requirements are not invoked.

3. OPERATIONAL REQUIREMENTS. The equipment shall operate within the minimum ranges and accuracies specified below.

3.1 Test voltages. 100, 250, 500, and 1,000 Vdc. The open circuit test voltage shall not fluctuate more than $\pm 1\%$ during generator operation.

3.2 Resistance range. 0 to 5,000 ohms. Accuracy: $\pm 1.25\%$.

3.3 Insulation test range. 0 to 2,000 megohms.

3.4 Display. An analog meter with a scale length of 60 mm (2.4 in) excluding infinity shall be provided. A digital display with equal resolution capabilities is acceptable for this application.

3.5 Safety operation. The meter shall operate as a voltmeter when the leads are initially connected to a circuit. A momentary operating control shall be provided to place the equipment into megohmmeter operation and, when released, will return to voltmeter operation. Accuracy: $\pm 5\%$.

3.6 Terminals. Positive, common, and guard terminals.

4. GENERAL REQUIREMENTS.

4.1 Power source. Hand generator or battery power. The hand generator shall require no greater than 170 rpm to obtain selected test voltage. When battery power is provided, MIL-T-28800 dc internal power source requirements are invoked. The batteries shall be of a commercially available type and provide 12 months of normal operation before replacement. The nominal power source requirements are not invoked.

4.2 Weight. 4.5 kg (10 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.4 Accessories. Three test leads: 3.7M (12 ft).

4.5 Transit case. The Style P transit case shall provide protection for all components of the megohmmeter.

4.6 Calibration interval. 12 months minimum. End-of-interval confidence factor: 72%.